National Institute of Environmental Health Sciences

Impacts of weather events on gastrointestinal medical visits in Taiwan

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Abstract:

Background: Studies have shown that infectious disease outbreaks are often associated with natural disasters, such as floods and excessive precipitation. However, exploring the impact of drought on human health is scarce. This study explored impacts on gastrointestinal medical visits in connection with typhoons, floods and water outage in Taiwan. Methods: Health care data, weather events data (including typhoon, flood and water outage), and meteorological data were obtained from the National Health Insurance Bureau and the Central Weather Bureau, respectively. We measured the monthly average morbidity of medical visits for gastroenteritis, and the associated relative risks (RR) by demographic factors, ambient temperature and climatic events. Results: Monthly medical visits for gastroenteritis were higher during January-March and July-September. Comparing to normal periods, the relative risk (RR) (1.31, 95 percent confidence interval (CI) 1.27-1.33) for a gastrointestinal medical visit was higher during the water outage period, and lower in typhoons and floods (RR=0.944 and 0.934, respectively, both p>0.05). After adjusting for weather events, demographic factors and daily maximum temperature, the relative risk for gastrointestinal medical services increased at higher ambient temperatures. The probability to have medical visits for gastroenteritis was lower in males than in females (RR=0.69, p

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https://isee.conference-services.net/reports/template/onetextabstract.xml?xsl=template/onetextabstract.xsl&conferenceID=1651&abstractID=308382

Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Food/Water Security, Temperature

Extreme Weather Event: Drought, Flooding, Hurricanes/Cyclones

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Asia

Asian Region/Country: Other Asian Country

Other Asian Country: Taiwan

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease (other): Gastroenteritis

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Elderly

Other Vulnerable Population: Female

Resource Type:

format or standard characteristic of resource

Research Article

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content